

Crack Detection Gauges FAC series



These gauges are designed to measure the propagation speed of fatigue crack in a metal specimen. The gauges are bonded with an adhesive on the position where the crack is initiated or the crack initiation is expected. The grids of the gauges, which are aligned at interval of 0.1mm or 0.5mm, are disconnected one by one with the propagation of the crack. The gauges are used together with the crack gauge adapter CGA-120B, and the disconnection of one grid is measured as the change of approx. 45 or 40×10^{-6} strain by a strainmeter.

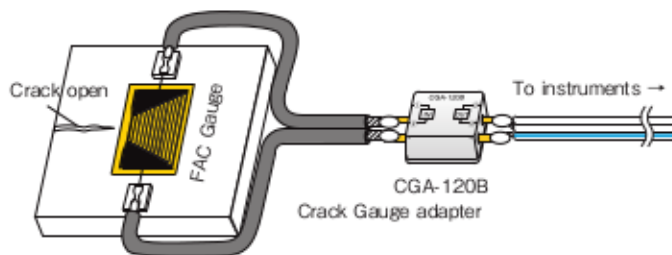
Operating temperature range

-30 ~ +80°C

Applicable adhesives

CN -30 ~ +80°C

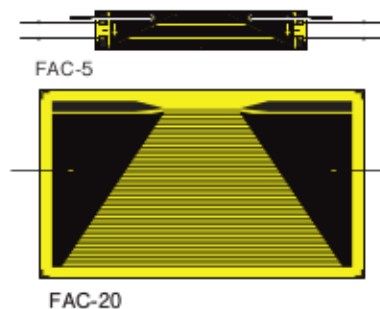
RP-2 -30 ~ +80°C



CRACK GAUGES

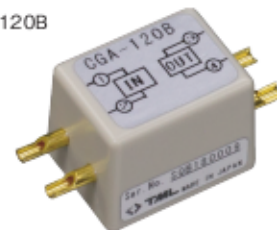
Gauge type	FAC-5	FAC-20
Measuring range	4.5mm	20mm
Gauge resistance	approx. 1Ω	
Grid interval	0.1mm	0.5mm
Number of grids	46	41
Output per grid	approx. 45×10^{-6} strain	approx. 40×10^{-6} strain
Operating temperature	-30 ~ +80°C	
Backing size	28 x 5mm	43 x 25mm

● Crack Gauges



Minimum order quantity is 10 crack gauges.

● Crack Gauge adapter CGA-120B



Minimum order quantity is 1 crack gauge adapter.

Crack Gauge adapter CGA-120B

Measuring point	1 point
Allowable temperature	-30 ~ +80°C
Bridge connection	Quarter bridge 3-wire method 120Ω
Dimensions	20(W) x 15(H) x 15(D) mm (except projection parts)
Weight	5g

· Option F: LEAD-free soldering

Example) Crack gauge adapter FAC-5-F / FAC-20-F
CGA-120B-F



AXIAL STRESS MEASUREMENT